ATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of.

Roland Henry PRATT

Application No.: New U.S. National Stage of

PCT/GB01/02616

Filed: January 25, 2002 Docket No.: 111805

GAS LASER AND OPTICAL SYSTEM

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Page 1, line 32 to page 2, line 4, delete current paragraph and insert therefor:

Back-reflection is undesirable in the devices mentioned above and in all devices which require a specific frequency of laser light, because excessive back- reflection interacts with the laser to change the polarisation and output frequency of the laser light. Various

HeNe lasers suffer from sensitivity to back- reflection.

IN THE CLAIMS:

Please replace claims 5-7 as follows:

(Amended) An interferometric displacement determination device as claimed

in claim 3 wherein the HeNe gas ratio is about 80:20 to about 90:10 respectively.

(Amended) An optical apparatus or interferometric displacement 6. determination device as claimed in claim 1 wherein the laser achieves a frequency

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